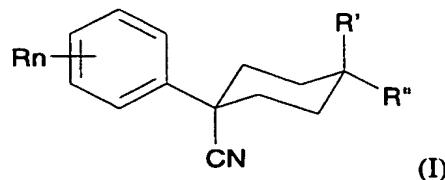


Claims

1. A process for preparing a compound of formula (I)



5

where

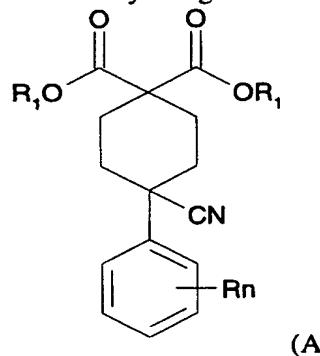
R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5;

10 m is 0 - 6; and

R' and R'' are independently hydrogen or CO(O)X where X is hydrogen or C₁-6alkyl;

which process comprises decarboxylating the diacid or diester of Formula (A)



15 where R₁ is hydrogen or C₁-6 alkyl-ester forming group of 1-6 carbon atoms and R and n are the same as for Formula (I).

2. The process of claim 1 wherein the diester or diacid is combined with about 1 equivalent of a base, about 3 equivalents of water and about 3 equivalents of an alkali salt in a suitable solvent and heated to between about 100 to 150 °C for about 4-8 hours.

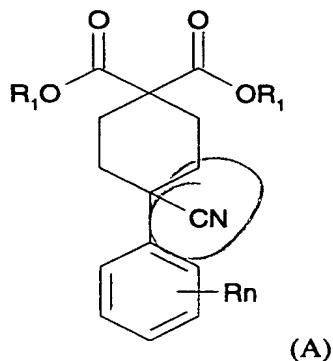
20 3. The process of claim 1 wherein R₁ is hydrogen, methyl or ethyl and the base is pyridine and the salt is lithium chloride.

Sub A1 4. The process of any one of claims 1-3 wherein n in R_n is 2 and one group is substituted on at the 3 position and the other group is substituted on the 4 position.

5. The process of any one of claims 1-4 wherein R₁ is methyl, one of R_n is methoxy, -O-CF₃, -O-CHF₂, or -O-CH₂CHF₂ and the other is C₄-6cycloalkyloxy.

25 6. The process of any one of claim 1-5 wherein n in R_n is 2 and one is 3-cyclopentyloxy and a second R_n group is 4-methoxy.

7✓ A compound of formula (A)



Sub 06
wherein

5 R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5;

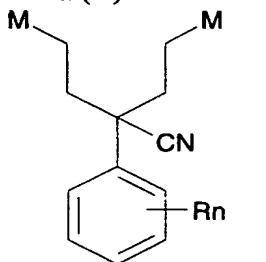
m is 0 - 6;

R₁ is hydrogen or a C₁-6 alkyl-ester forming group of 1-6 carbon atoms.

10 8. A compound according to claim 7 wherein n in R_n is 2 and R_n is methoxy, -O-CF₃, -O-CHF₂, or -O-CH₂CHF₂ and the other is C₄-6cycloalkyloxy.

Sub 02 9. A compound according to any one of claims 7 or 8 wherein n in R_n is 2 and one is 3-cyclopentyloxy and a second R_n group is 4-methoxy.

10. A compound of Formula (B)



15

wherein

R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5;

20 m is 0 - 6; and

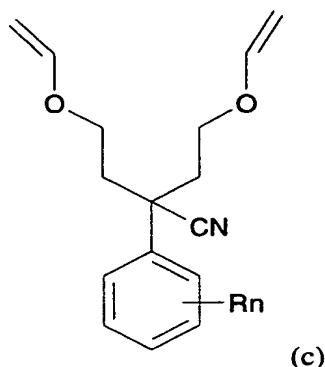
~ M is OH, an activated hydroxyl group, or halo.

11. A compound according to claim 10 wherein n in R_n is 2 and R_n is methoxy, -O-CF₃, -O-CHF₂, or -O-CH₂CHF₂ and the other is C₄-6cycloalkyloxy.

Sub 03 12. A compound according to claim 10 or 11 wherein n in R_n is 2 and one is 3-cyclopentyloxy and the second R_n group is 4-methoxy.

13.

A compound of Formula (C)



(c)

wherein

R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

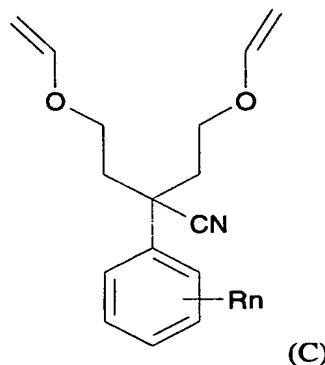
n is 1-5; and

m is 0 - 6.

14. A compound according to claim 13 wherein n in R_n is 2 and R_n is methoxy, -O-CF₃, -O-CHF₂, or -O-CH₂CHF₂ and the other is C₄-6cycloalkyloxy.

15. A compound according to claim 13 or 14 wherein n in R_n is 2 and one is 3-cyclopentyloxy and a second R_n group is 4-methoxy.

16. A process for preparing a compound of Formula (C)



(C)

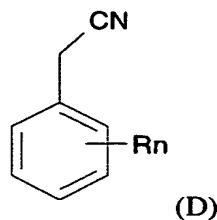
15 wherein

R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5; and

m is 0 - 6.

20 which comprises by treating the nitrile of formula (D)



with 2-chloroethyl vinyl ether and a strong base

where, in Formula (D):

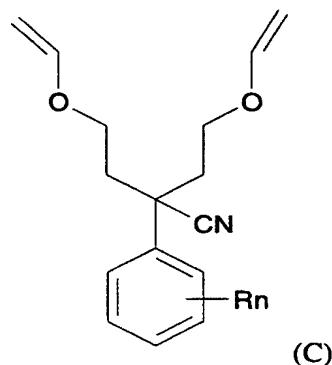
R is halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens, C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5; and

m is 0 - 6.

17. A process for preparing a compound of Formula (I) according to claim 1,
which process comprises

10 a. converting the vinyl ethyl ether of Formula (C)



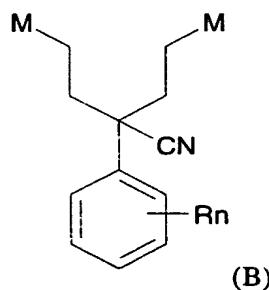
wherein R and n are halo, C₁-6alkyl, C₁-6alkyl substituted with 1 to 4 halogens,

15 C₁-6alkoxy, C₁-6alkenyl, -O-(CH₂)_mcycloalkyl of 3-6 carbons;

n is 1-5;

m is 0 - 6;

to a compound of Formula (B)



20

where M is OH,

b. converting the hydroxyl group of Formula (B) to a compound of Formula (B)

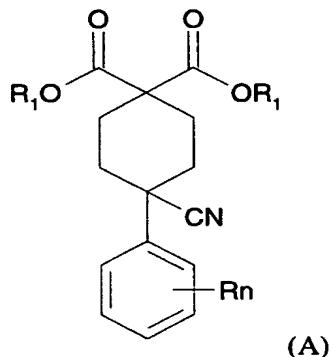
where M is a tosylate, mesylate or a triflate,

c. converting the tosylate, mesylate or triflate in Formula (B) to a compound of

5 Formula (B) where M is halo,

d. treating the di-halo compound with dialkyl malonate to obtain a compound of

Formula (A)



10 where R₁ is lower alkyl,

e. optionally saponifying the diester of Formula (A) to obtain a compound of

Formula (A) where R₁ is hydrogen, and

f. decarboxylating a compound of Formula (A) where R₁ is hydrogen or C₁-6alkyl to obtain a compound for Formula (I) where one of R' is hydrogen and the other is CO(O)X

15 where X is C₁-6alkyl or hydrogen.

18. The process of claim 17 wherein n in R_n is 2 and R_n is methoxy, -O-CF₃, -O-CHF₂, or -O-CH₂CHF₂ and the other is C₄-6cycloalkyloxy, M is tosylate, and thereafter iodo, and R1 is methyl or ethyl.

~~Sub 2005~~ 19. A compound according to claim 17 or 18 wherein n in R_n is 2 and one is 3-cyclopentyloxy and the second is 4-methoxy.